

Appl. No. 10/086,795  
Art Unit 2831  
Amdt. dated 04/28/05

### I. LISTING OF CLAIMS

All pending claims are reproduced below. This listing of claims will replace all prior versions, and listings, of claims in the application:

#### Listing of Claims

Claim 1. (Previously Presented) A method for automatically producing a music video, comprising:

- receiving an audio signal;
- receiving a video signal;
- detecting transition points in the audio signal and the video signal;
- aligning in time the video signal with the audio signal;
- editing the aligned video signal; and
- merging the aligned video signal with the audio signal to form a music video signal.

Claim 2. (Original) The method of Claim 1, wherein the step of aligning comprises:

- forming a video segment comprising a portion of the video signal based upon the transition points in the video signal; and
- aligning the video segment with a transition point in the audio signal.

Claim 3. (Previously Presented) The method of Claim 2, wherein:

- a boundary of the video segment is defined by a transition point in the video signal; and
- the boundary of the video segment is aligned with the transition point in the audio signal.

Claim 4. (Previously Presented) The method of Claim 3, wherein:

- the boundary is located at the beginning of the video segment.

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Claim 5. (Original) The method of Claim 2, wherein:

a first and second transition in the audio signal define an audio segment having a length; and the video segment has a video segment length, wherein the video segment length is reduced to equal the length of the audio segment.

Claim 6. (Original) The method of Claim 5, wherein:

the video segment is truncated in order to equal the length of the audio segment.

Claim 7. (Original) The method of Claim 5, wherein:

the video segment is evaluated using a suitability measurement in order to define a portion of the video segment equal to the length of the audio segment.

Claim 8. (Original) The method of Claim 1, wherein the step of detecting comprises:

parameterizing the audio and video signals in order to form corresponding sets of feature vectors; and

evaluating the sets of feature vectors in order to determine the location of transitions in the corresponding signals.

Claim 9. (Original) The method of Claim 8, wherein:

the parameterization includes a histogram.

Claim 10. (Original) The method of Claim 8, wherein:

the parameterization includes a frequency domain transform.

Claim 11. (Original) The method of Claim 8, wherein the step of evaluating comprises:

constructing a self-similarity matrix based upon a distance metric for a set of feature vectors; and

extracting structure from the self-similarity matrix via a kernel correlation.

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Claim 12. (Original) The method of Claim 11, wherein:  
the distance metric is the Euclidean distance between feature vectors.

Claim 13. (Original) The method of Claim 11, wherein:  
the distance metric is the cosine of the angle between feature vectors.

Claim 14. (Original) The method of Claim 11, wherein:  
the distance metric is the Karhunen-Loeve distance.

Claim 15. (Original) The method of Claim 8, wherein:  
the evaluation of sets of feature vectors includes determining a difference between adjacent feature vectors.

Claim 16. (Original) The method of Claim 8, wherein:  
the evaluation of sets of feature vectors includes determining an accumulated difference between a plurality of feature vectors.

Claim 17. (Original) The method of Claim 8, wherein:  
the evaluation of sets of feature vectors includes comparing the time period between a previous transition and a feature vector in order to determine the location of a transition.

Claim 18. (Original) The method of Claim 1, wherein the step of aligning in time comprises:  
aligning the detected transitions in the audio signal with the detected transitions in the video signal using dynamic programming.

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**Claim 19.** (Original) The method of Claim 1, wherein the step of aligning in time comprises:  
aligning the detected transitions in the audio signal with the detected transitions in the video signal using the tempo of the audio signal.

**Claim 20.** (Previously Presented) The method of Claim 1, wherein the step of aligning in time comprises:  
adjusting a transition detection threshold to produce a specific number of transitions corresponding to the desired number of video cuts; and  
aligning the transitions of the audio signal with the transitions of the video signal.

**Claim 21.** (Original) The method of Claim 11, wherein:  
the width of the kernel determines the duration of transitions detected.

**Claim 22.** (Original) The method of Claim 1, wherein the step of merging comprises:  
combining the audio signal with a second audio signal associated with the video signal, wherein the audio signal is reduced in volume during periods of speech on the second audio signal.

**Claim 23.** (Original) The method of Claim 1, wherein the step of aligning comprises:  
receiving a user selection designating a video segment for inclusion in the music video signal.

**Claim 24.** (Canceled)